



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,355	04/28/2005	Ulrich Schubert	208244/0002	8343

26610 7590 01/24/2007  
STROOCK & STROOCK & LAVAN LLP  
180 MAIDEN LANE  
NEW YORK, NY 10038

EXAMINER
----------

SALVOZA, M FRANCO G

ART UNIT.	PAPER NUMBER
-----------	--------------

1648

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**UNITED STATES DEPARTMENT OF COMMERCE****U.S. Patent and Trademark Office**

Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

10510355

EXAMINER
----------

ART UNIT	PAPER
----------	-------

20070117

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

The reply filed on November 1, 2006 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): applicant did not make a proper species election as instructed in the Restriction Election. As page 3 of the Restriction Election indicates, if Group I is elected for examination, further election of species is required: one of the mechanisms (either inhibits, regulates, blocks or affects) must be elected as recited in claims 46 and 47; one of the mechanisms for the additional agent must be elected as recited in claim 48; only one agent from the entire group of compounds must be elected from the entire group recited in claims 51-53. See 37 CFR 1.111.

Since the above-mentioned reply appears to be bona fide, applicant is given ONE (1) MONTH or THIRTY (30) DAYS from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Applicant is advised that the reply to a restriction requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

A copy of the May 2, 2006 Restriction Requirement is hereby enclosed.

**BRUCE R. CAMPELL, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600**

Franco

Application/Control Number: 10/510,355

Page 2

Art Unit: 1648

### DETAILED ACTION

After review of the previous Action, it was determined that upon further consideration that further restriction is appropriate for a thorough and complete examination. The Office regrets any inconvenience. The restriction set forth below replaces the previous one.

#### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 44-53, drawn to an agent for inhibiting at least one of release, maturation and replication of a member of the Flaviviridae family.

Group II, claim(s) 54-84, drawn to a method of inhibiting at least one of the entry/internalization process, the replication and maturation of Flaviviridae.

Group III, claim(s) 85-86 drawn to a method of producing agents for inhibiting the release, maturation and replication of Flaviviridae.

The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: proteasome inhibitors are known in the art. Based on a preliminary search of the prior art, Kim et al. ("Proteasome Inhibition by the Natural Products Epoxomicin and Dihydroeponemycin: Insights into Specificity and Potency," Bioorganic & Medicinal Chemistry Letters 9, 3335-3340 (1999)) teaches proteasome inhibitor epoxomicin (recited in claim 52) and its structurally-related

inhibitory activity. Therefore, the proteasome inhibitor epoxomicin lacks a special contribution over the prior art, breaking unity of invention among claims 44-86, and thus proteasome inhibition cannot be a special technical feature shared by the claims and four Groups.

### ***Species Election***

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

#### **If Group I is elected, then further election is required**

Claims 44, 45: one of the diseases must be elected

Claims 46, 47: one of the mechanisms (inhibits, regulates, blocks or affects) must be elected

Claim 48: one of the mechanisms for the additional agent must be elected

Claims 51-53: One of the agents from the entire group of compounds (substance classes, subclasses, inhibitors, and inhibitors from the PS series) must be elected

#### **If Group II is elected, then further election is required**

Claim 44: One of the agents from the entire group of compounds (substance classes, subclasses, inhibitors, and inhibitors from the PS series) must be elected

Claims 54-64, 66-73, 79-84: one of the mechanisms must be elected

Claim 74: one of the diseases must be elected

Claims 65, 76-78: One of the coinfection viruses must be elected

If Group III is elected, then further election is required

Claims 44, 45: One of the agents from the entire group of compounds (substance classes, subclasses, inhibitors, and inhibitors from the PS series) must be elected

Claims 85, 86: one of the mechanisms must be elected; one of the diseases must be elected

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic: 49, 50, 75.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Diseases; Agents/compounds (substance classes; inhibitors; inhibitors of the PS series):

The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the species of

Art Unit: 1648

Flaviviridae substance classes, inhibitors, and inhibitors of the PS series are separate products having distinct structures and distinct physical, chemical and functional properties requiring separate searches of the prior art.

Mechanisms: The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the recited mechanisms are separate methods with patentably distinct steps, methods of operation and effects requiring separate searches of the prior art.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116. Amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re*

Art Unit: 1648

*Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Franco Salvoza whose telephone number is (571) 272-8410. The examiner can normally be reached on M-F.

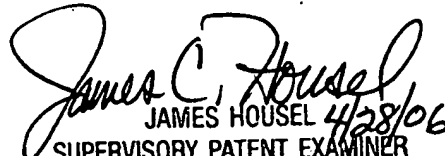
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 1648

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
M. Franco Salvoza  
Patent Examiner  
April 24, 2006

  
JAMES HOUSEL 4/28/06  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600